WHAT IS CLAIMED IS:

1. A transistor for an integrated circuit, comprising:

a source region in a substrate;

a drain region in the substrate;

a channel region between the source and drain regions, wherein the source and drain regions are separated by a channel length; and

a plurality of pocket implants extending into the channel region between the source region and the drain region to cause a reverse short channel effect for the transistor.

2. The transistor of claim 1, wherein the plurality of pocket implants merge in the channel region.

3. The transistor of claim 1, wherein the plurality of pocket implants merge at a midpoint in the channel length in the channel region.

4. The transistor of claim 1, wherein the pocket implants are doped with a dopant of opposite polarity from that used for the source and drain regions.

5. The transistor of claim 4, wherein the source and drain regions are n-type, and the pocket implants are p-type.

6. The transistor of claim 5, wherein the p-type pocket implants are formed with a boron dopant.

7. The transistor of claim 6, wherein the pocket implants are further doped with a blanket boron implant.

8. The transistor of claim 7, wherein a dosage of the blanket boron implant is about 10^{11} cm^{-2}.

9. The transistor of claim 4, wherein the source and drain regions are a p-type material, and the pocket implants are an n-type material.

10. The transistor of claim 9, wherein the n-type pocket implants are formed with a phosphorus dopant.

11. The transistor of claim 1, wherein due to the reverse short channel effect, the transistor has a higher punch-through voltage.

12. The transistor of claim 1, wherein the transistor is a native transistor.

13. The transistor of claim 12 where in an enhancement implant is absent from the channel region.

14. The transistor of claim 1 wherein the transistor has a channel length about equal to a channel length of a logic transistor in the same substrate.

15. The transistor of claim 1 wherein the pocket implants are formed by implantation at an angle.

16. A circuit in an integrated circuit, comprising:

first and second transistors coupled in series, each of the transistors comprising:

a source region in a substrate;

a drain region in the substrate;

a channel region between the source and drain regions, wherein the source and drain regions are separated by a channel length; and

a plurality of pocket implants extending into the channel region between the source region and the drain region to cause a reverse short channel effect for the transistor.

17. The circuit of claim 16, wherein a punch-through voltage for the series of transistors is greater than a punch-through voltage for a transistor with a channel length twice as long as the channel length of the first and second transistors.

18. The circuit of claim 16, further comprising a capacitor in series with the first and second transistor.

19. The circuit of claim 18, wherein the circuit is a voltage pump.

20. The circuit of claim 16, wherein the circuit is ~~a memory cell.~~

21. A method of fabricating an integrated circuit comprising the steps of:

depositing a field implant;

depositing a well implant; and

depositing an enhancement implant, wherein the steps of depositing a field implant, depositing a well implant, and depositing an enhancement implant are done using a single mask.

22. The method of claim 21 wherein the well implant is an n-well implant.

23. The method of claim 21 wherein the well implant is a p-well implant.

24. The method of claim 21 further comprising the steps of:

forming a high voltage native transistor by blocking the well implant and the enhancement implant; and

offsetting the field implant from an active area of the native transistor, thereby obtaining high gated-diode junction breakdown characteristics.

25. The method of claim 21, further comprising the step of implanting a pocket implant to improve a punch-through immunity.

26. The method of claim 21 further comprising the step of:

depositing two pocket implants; and

merging the pocket implants together by lateral diffusion, whereby a channel doping profile from the pocket implant diffusion exhibits reverse-short-channel effect.